

RECEIVED
CENTRAL FAX CENTER

NOV 05 2009

IN THE CLAIMS:

Claims 1-7 (canceled).

Claim 8 (currently amended): A method for generating/displaying a plane shape, comprising the steps of:

setting a normal line, which is equivalent to a tangent plane of a curved surface of an object shape, at each vertex of a triangle shape plane patch which is a basic form necessary for generating/displaying the object shape,

decomposing, in a specific direction, said set normal line on a tangent plane at said each vertex of the triangle shape plane patch, thus setting a tangent line;

forming, between two corresponding vertexes of said triangle shape plane patch and in a direction based on said two corresponding vertexes, an equivalent normal line that becomes a new tangent plane of the object shape;

determining another tangent line at where said normal line is formed; and

further determining a normal line equivalent to the tangent plane of the curved surface,

thus creating the object shape; and

displaying the object shape on a display.

Claims 9-14 (canceled).

Claim 15 (previously presented): The method for generating/displaying a plane shape according to claim 8, wherein new normal lines are set sequentially between vertex normal lines or between sides of said triangle shape plane basic patch, thus forming a new triangle shape plane patch with said normal lines.

Claim 16 (previously presented): The method for generating/displaying a plane shape according to claim 8, wherein new normal lines are set sequentially and repeatedly between vertex normal lines or between all triangle shape plane patches.

Claim 17 (previously presented): The method for generating/displaying a plane shape according to claim 8, wherein setting of new normal lines based on triangle shape plane patch formed by set normal lines is sequentially performed repeatedly until reaching a display precision of the object shape.

Claim 18 (previously presented): The method for generating/displaying a plane shape according to claim 8, wherein, the method is executed by a system for selecting a basic patch which is set with a normal line among basic triangle shape plane patches representing a schematic shape of the object shape.

Claim 19 (previously presented): The method for generating/displaying a plane shape according to claim 8, wherein a new normal line is set by sequentially selecting triangle shape plane basic patch on which a normal line is set, thus forming an entire shape of the object shape recursively.

Claim 20 (currently amended): A method for generating/displaying a plane shape according to claim 8, comprising the steps of

at each vertex of a triangle shape plane patch that is based on a predetermined normal line and a predetermined positional information, determining a normal line which is equivalent to a predetermined tangent plane at a predetermined position; and

utilizing a contact point information of the normal line and tangent plane, forming a basic patch for the triangle shape plane patch.

Claim 21 (currently amended): A method for generating/displaying a plane shape according to claim 8, comprising the steps of

at each vertex of a triangle shape plane patch that is based on a predetermined normal line and a positional information thereof, determining a normal line which is equivalent to a predetermined tangent plane at a predetermined position; and

with a basic patch formed by utilizing a normal line that is equivalent to a curved surface and an existing position thereof, forming an object shape.

Claim 22 (previously presented): The method for generating/displaying a plane shape according to claim 20 or 21, further comprising the steps of:

combining vertexes where said predetermined normal lines exist;

decomposing a normal line existing at each of predetermined vertexes of a predetermined triangle shape plane patch on a predetermined equivalent tangent plane, and

at a position where a normal line that is equivalent to a predetermined new tangent plane between two vertexes, determining a normal line in a direction based on two predetermined corresponding vertexes.

Claim 23 (previously presented): The method for generating/displaying a plane shape according to claim 20 or 21, further comprising the steps of:

combining vertexes, where predetermined normal lines exist, until reaching a necessary shape generating/displaying precision;

decomposing a normal line, existing at each of predetermined vertexes, on an equivalent tangent plane, and

at a position where a normal line that is equivalent to a predetermined new tangent plane between two vertexes, repeating actions of determining a normal line in a direction based on said two corresponding vertexes,

thus generating and displaying an intended shape.